(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 14 July 2005 (14.07.2005)

PCT

(10) International Publication Number WO 2005/064547 A1

G07C 9/00, (51) International Patent Classification⁷: H04L 29/06

(21) International Application Number:

PCT/EP2004/014099

(22) International Filing Date:

10 December 2004 (10.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: PCT/IB03/06186

> 24 December 2003 (24.12.2003) $^{\mathrm{IB}}$

PCT/EP04/004923 7 May 2004 (07.05.2004) EP

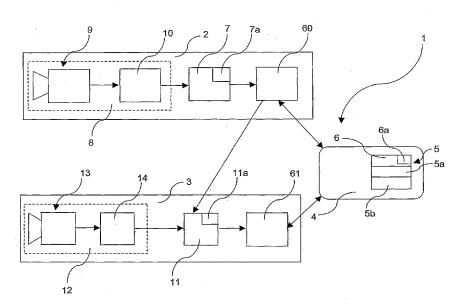
- (71) Applicant (for all designated States except US): TELE-COM ITALIA S.P.A. [IT/IT]; Piazza Degli Affari, 2, I-20123 Milano (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BALTATU. Madalina [IT/IT]; Telecom Italia S.p.A., Via G. Reiss

Romoli, 274, I-10148 Torino (IT). D'ALESSANDRO, Rosalia [IT/IT]; Telecom Italia S.p.A., Via G. Reiss Romoli, 274, I-10148 Torino (IT). D'AMICO, Roberta [IT/IT]; Telecom Italia S.p.A., Via G. Reiss Romoli, 274, I-10148 Torino (IT).

- (74) Agents: BATTIPEDE, Francesco et al.; Pirelli & C. S.p.A., Viale Sarca, 222, I-20126 Milano (IT).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: USER AUTHENTICATION METHOD BASED ON THE UTILIZATION OF BIOMETRIC IDENTIFICATION TECH-NIQUES AND RELATED ARCHITECTURE



(57) Abstract: The present invention refers to a user authentication method based on the use of identification biometric techniques comprising the steps of: - generating a reference biometric template from a first biometric image of a user to be authenticated; splitting the reference biometric template into a first and a second reference biometric template portion that can be physically separated; - signing and enciphering the first and the second reference biometric template portion; - storing the signed and enciphered first and the second reference biometric template portion into different memories.



WO 2005/064547 A1



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report